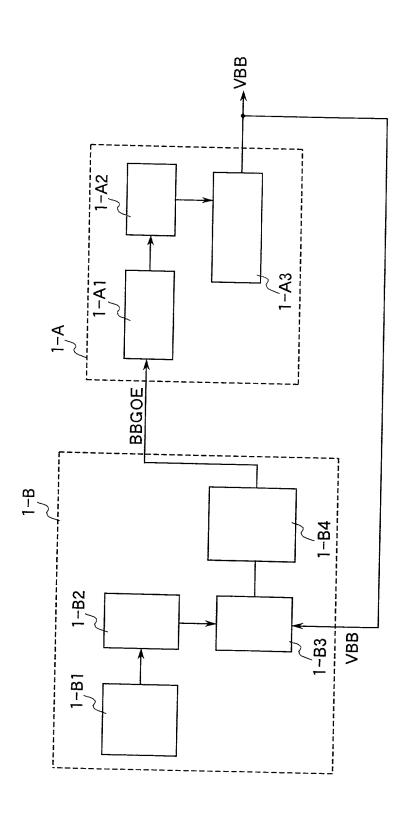
Inventor: KONDO et al.
Docket No. 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD
Attorney Name: Douglas P Mueller
Phone No.. 612.371.5237
Sheet 1 of 18

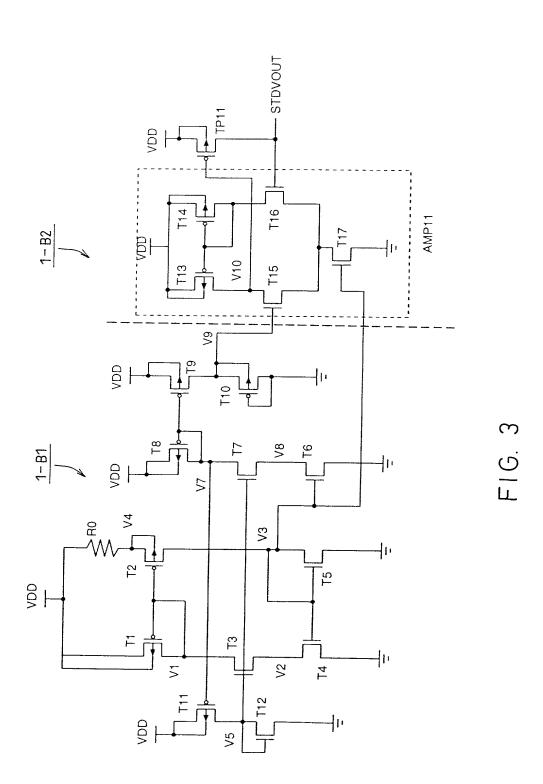


Inventor: KONDO et al.
Docket No. 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD...
Attorney Name: Douglas P Mueller
Phone No. 612 371.5237
Sheet 2 of 18

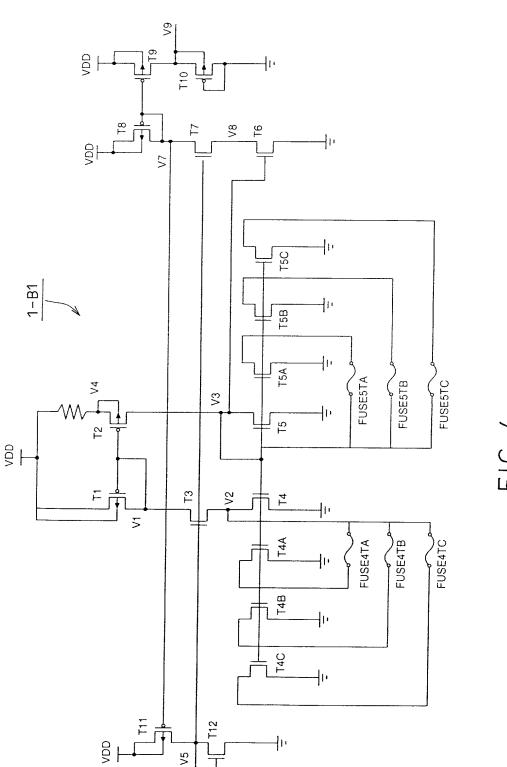
C>BBGOE BUF14 INV13 **INV12** 1-B4 1-B4' 1 INV 11 1-B2 M22 STDVOUT **TP11** QQ/ REFV0 R2, H. AMP11 1-B3 6/

F16. 2

Inventor: KONDO et al.
Docket No.: 10873 713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD. .
Attorney Name. Douglas P. Mueller
Phone No.: 612.371 5237
Sheet 3 of 18



Inventor: KONDO et al.
Docket No.: 10873.713US01
Title. SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD ..
Attorney Name Douglas P Mueller
Phone No · 612.371.5237
Sheet 4 of 18



Inventor: KONDO et al.
Docket No.: 10873 713US01
Title. SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD..
Attorney Name. Douglas P. Mueller
Phone No. 612.371.5237
Sheet 5 of 18

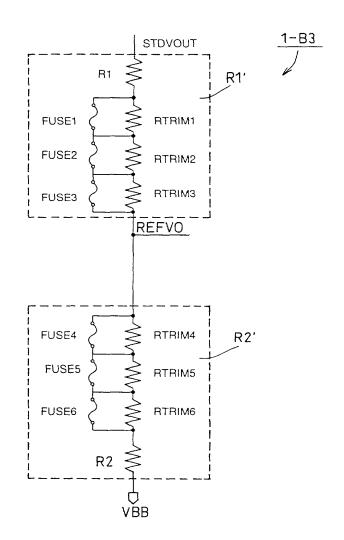
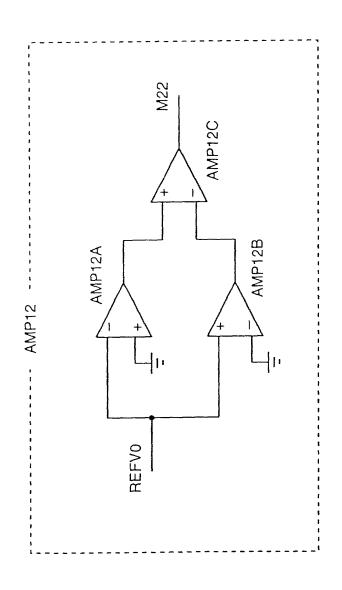
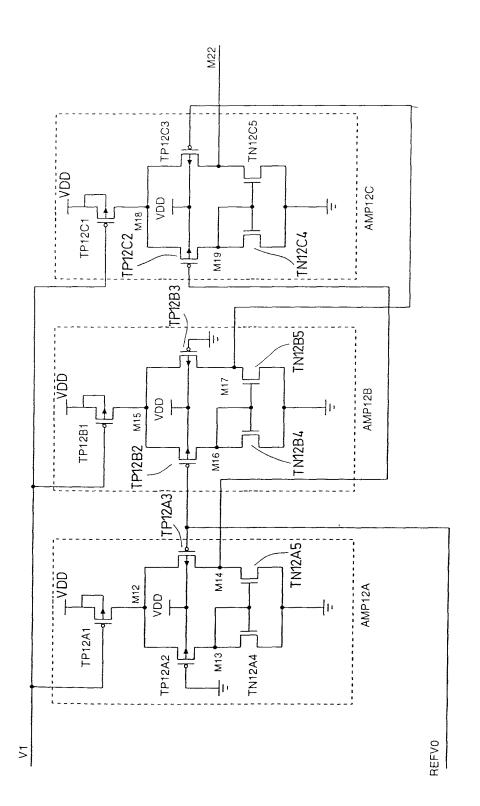


FIG. 5

Inventor KONDO et al
Docket No · 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD
Attorney Name. Douglas P Mueller
Phone No 612 371 5237
Sheet 6 of 18



Inventor: KONDO et al.
Docket No: 10873.713US01
Title. SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD..
Attorney Name: Douglas P. Mueller
Phone No: 612 371 5237
Sheet 7 of 18



Inventor: KONDO et al. Docket No.: 10873 713US01

Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD. Attorney Name Douglas P. Mueller
Phone No.: 612 371 5237
Sheet 8 of 18

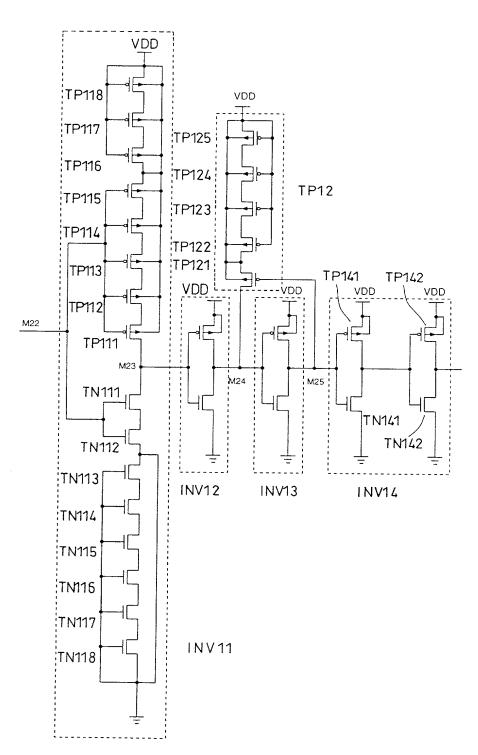


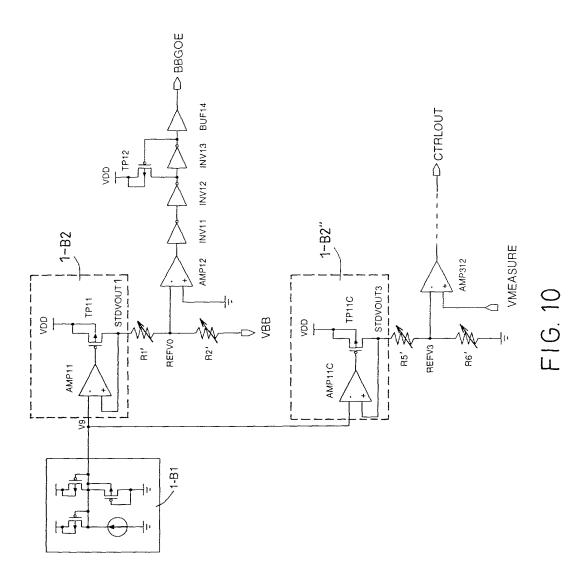
FIG. 8

Inventor: KONDO et al.
Docket No.: 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD...
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237
Sheet 9 of 18

□ BBGOE1 C>BBGOE2 INV211 INV212 INV213 BUF214 BUF14 INV13 INV12 INV11 AMP12 AMP212 STDVOUT1 STDVOUT2 TP11B VBB1 § F REFV0 E. R2, H4, H3, 1-B

Inventor: KONDO et al
Docket No: 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD.
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237

Sheet 10 of 18



Inventor KONDO et al.
Docket No.: 10873.713US01
Title. SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD ..
Attorney Name Douglas P. Mueller
Phone No.: 612 371.5237

Sheet 11 of 18

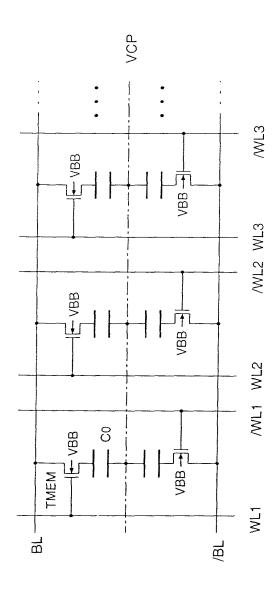


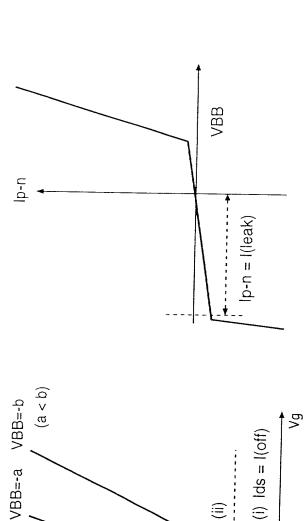
FIG. 11 (PRIOR ART)

Inventor: KONDO et al.
Docket No.: 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD Attorney Name. Douglas P. Mueller Phone No: 612 371 5237 Sheet 12 of 18

G(WL) S(Cell) D(BL) n I(off) I(leak) p-Sub. VBB

FIG. 12 (PRIOR ART)

Inventor: KONDO et al.
Docket No.: 10873 713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD... Attorney Name Douglas P. Mueller Phone No 612 371 5237 Sheet 13 of 18



 \equiv

VT1 VT2 VT3

VBB=0 VBB=-a

lds

FIG. 13A (PRIOR ART)

FIG. 13B (PRIOR ART)

Inventor: KONDO et al
Docket No 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD..
Attorney Name Douglas P. Mueller
Phone No. 612.371.5237
Sheet 14 of 18

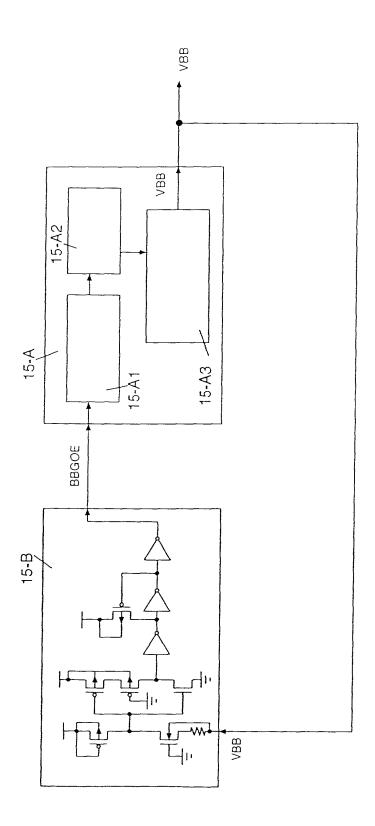


FIG. 14 (PRIOR ART)

Inventor: KONDO et al.
Docket No.: 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD...
Attorney Name: Douglas P. Mueller
Phone No. 612.371.5237
Sheet 15 of 18

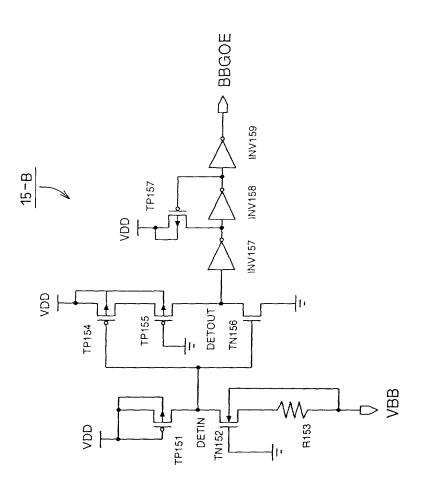
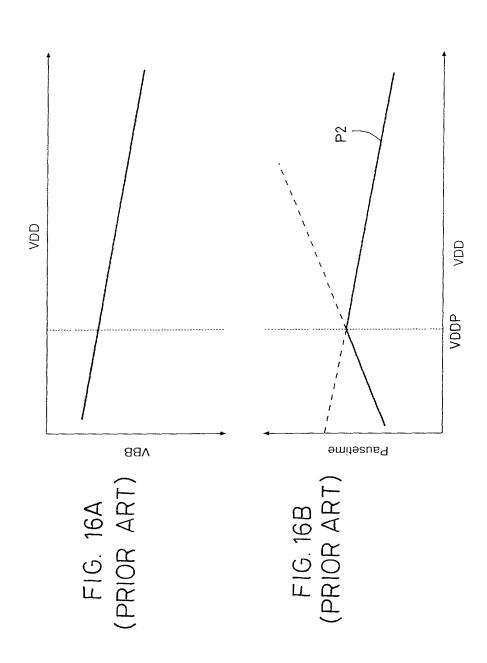


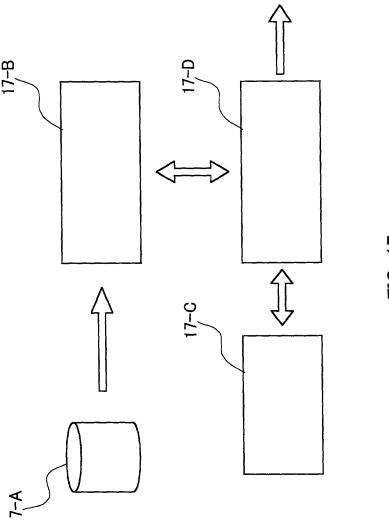
FIG. 15 (PRIOR ART)

Inventor: KONDO et al.
Docket No · 10873.713US01
Title: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD..
Attorney Name: Douglas P Mueller
Phone No.: 612.371.5237
Sheet 16 of 18





Inventor: KONDO et al.
Docket No.: 10873.713US01
Tutle: SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD.
Attorney Name: Douglas P. Mueller
Phone No: 612.371 5237
Sheet 17 of 18



Inventor: KONDO et al.
Docket No.: 10873.713US01
Tule SEMICONDUCTOR INTEGRATED CIRCUIT, TEST METHOD.
Attorney Name: Douglas P. Mueller
Phone No: 612.371 5237
Sheet 18 of 18